An aerial photograph of an industrial or military facility. In the foreground, a large, modern building with a grey roof and a series of gabled wooden structures is visible. The rest of the facility is filled with numerous smaller buildings, many of which are arched or dome-shaped, and a large number of vehicles, including trucks and cars, parked in various areas. The terrain is arid and sandy with some sparse vegetation.

# Aalo Atomics

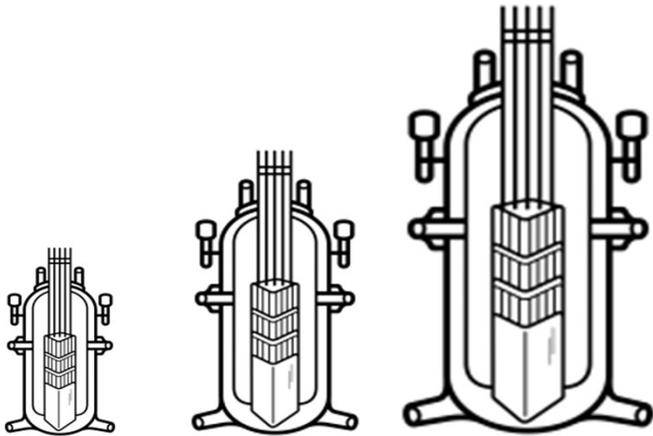
## Aalo's Integrated Regulatory & Deployment Roadmap

Yasir Arafat  
Cofounder, President & CTO

MARCH 10, 2026

Aalo

## Economies of Scale



# First Atomic Age

# 135

# Commercial Reactors Built



## 1 GW Nuclear



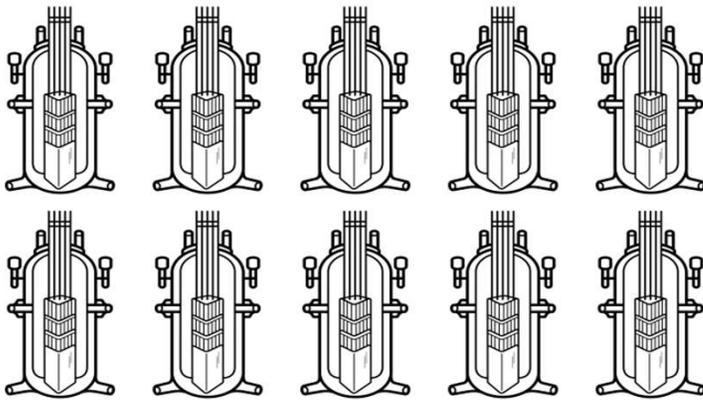
**10+ years**

## 1 GW Datacenter



**~3 years**

## Economies of Numbers



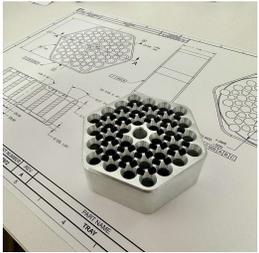
# Second Atomic Age

# 1+ GW

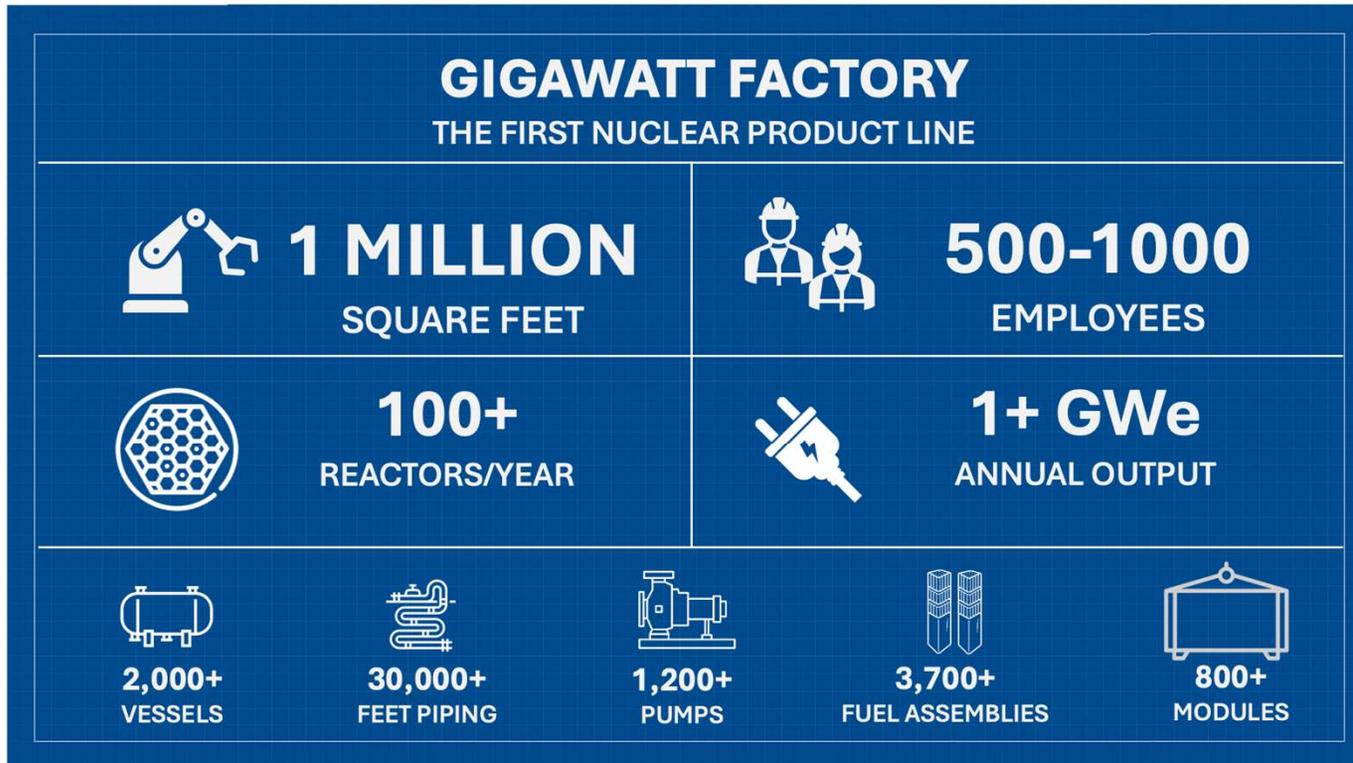
# Every Year



# Aalo is Making Mass-Manufactured Nuclear Reactors a Reality



# Launch GigaWatt Factory in 2028



**U.S. Manufacturing**

**Onshore Supply Chain**

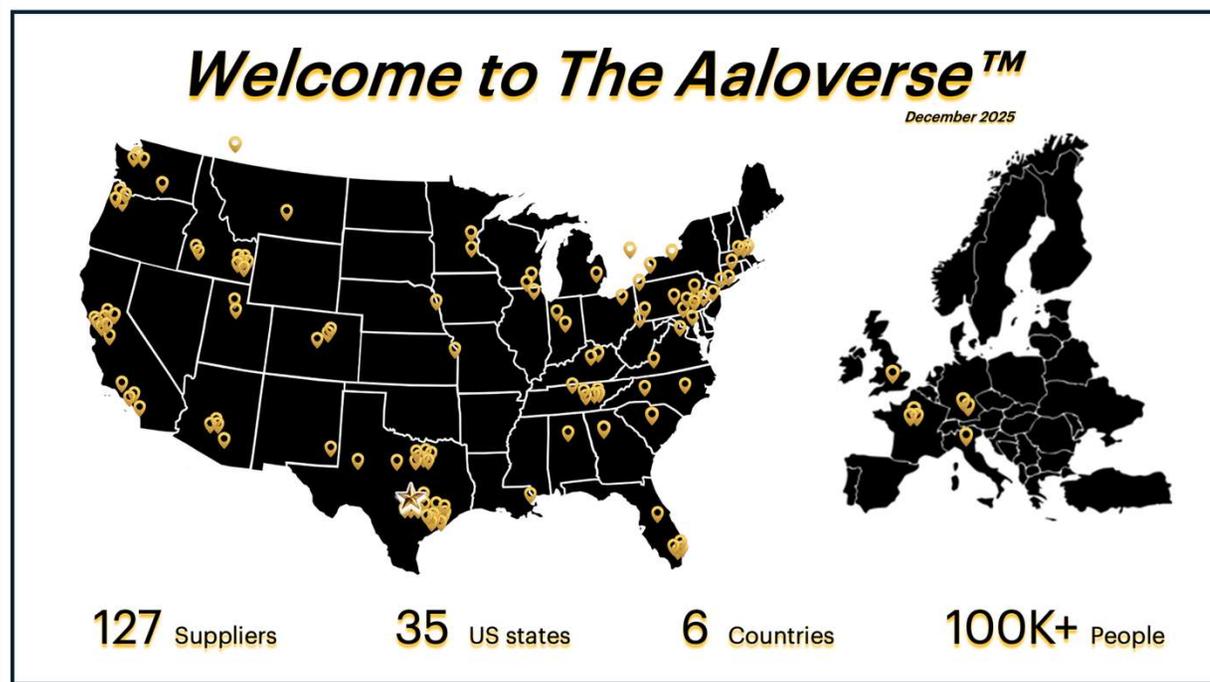
**Resilient Power**

**U.S. Leadership**

NOAK DEPLOYMENT PROVIDES AN OPPORTUNITY TO ONSHORE THE CRITICAL SUPPLY CHAIN IN THE U.S.



# Supply Chain Readiness



## Critical Materials

Aalo's MPP utilizes SS316 for the majority of the sodium-wetted equipment, carbon steel, and concrete for structural, sodium for coolant, graphite for moderator, boron carbide for neutron absorbers, and UO2 fuel.

## 90% U.S. Sourced

90% of our critical parts are sourced from the US. For additional items that cannot be sourced in the US, Aalo plans to purchase from only DFARS approved countries

THERE IS NO "UNOBTAINIUM" IN AALO'S DESIGN. ALL HARDWARE CAN EITHER BE PROCURED COMMERCIALY OR MADE IN-HOUSE



**Aalo aims to build  
1GW+ nuclear by end  
of 2030**



# Company Overview

## Founded, 2023

- Mass-manufactured nuclear power plants.
- Purpose-built for large onsite loads such as data centers and military installations.

## 140 Employees

- Grew from 2 employees 2.5 years ago.
- Driven and mission-aligned team.
- Diverse backgrounds spanning nuclear, manufacturing, and finance.

## \$136M+ Raised

- Seed: \$6M
- Series A: \$30M
- Series B: \$100M
- Post-Series B SAFE: unannounced

## Built Pilot Factory

- Austin, TX facility opened 2025
- Welding, Machining, Metrology
- 40,000 sqft
- Current work on siting a larger 1,000,000 sqft factory, move in 2027.



Factory HQ, Austin, TX



Engineering, Idaho Falls, ID

MASS-MANUFACTURED NUCLEAR PLANTS FOR DATA CENTERS & U.S. MILITARY BASES



# Technology Maturation Roadmap

TRL 6

Q1,26

100% Complete



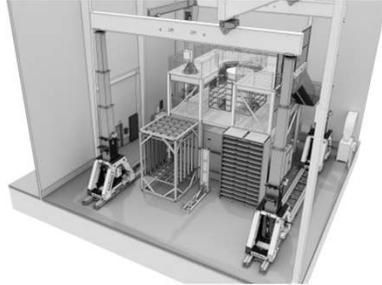
**Sodium Test Loop**

Component Qualification Testing

TRL 7

Q2,26

75% Complete



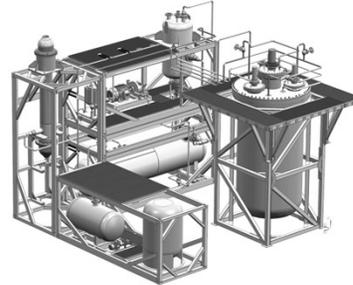
**Critical Test Reactor**

1<sup>st</sup> Nuclear Prototype

TRL 7+

Q3,26

65% Complete



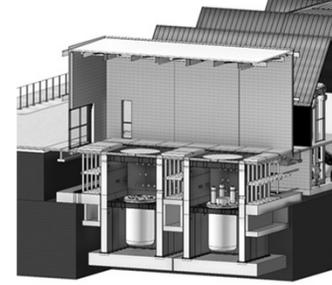
**Aalo-0**

Full-scale Non-nuclear Prototype

TRL 8

Q1,27

20% Complete



**Aalo-X**

Functional Pilot

TRL 9

Q3, 28

0% Complete



**Aalo Pod**

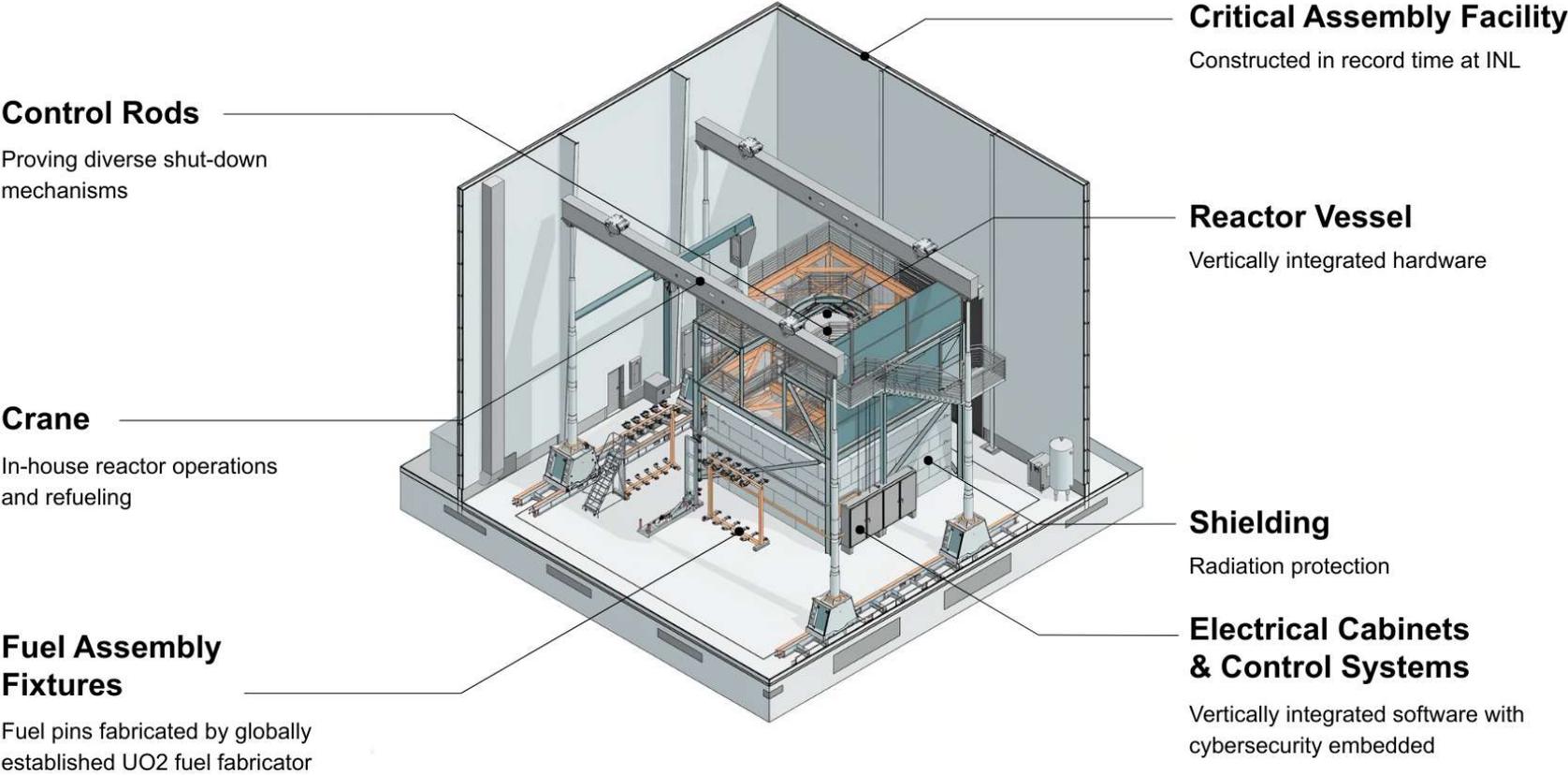
1<sup>st</sup> Commercial

By end of 2026, Aalo plans to become the U.S. experts in sodium powerplant technology



# Project FirstLight: Critical Test Reactor

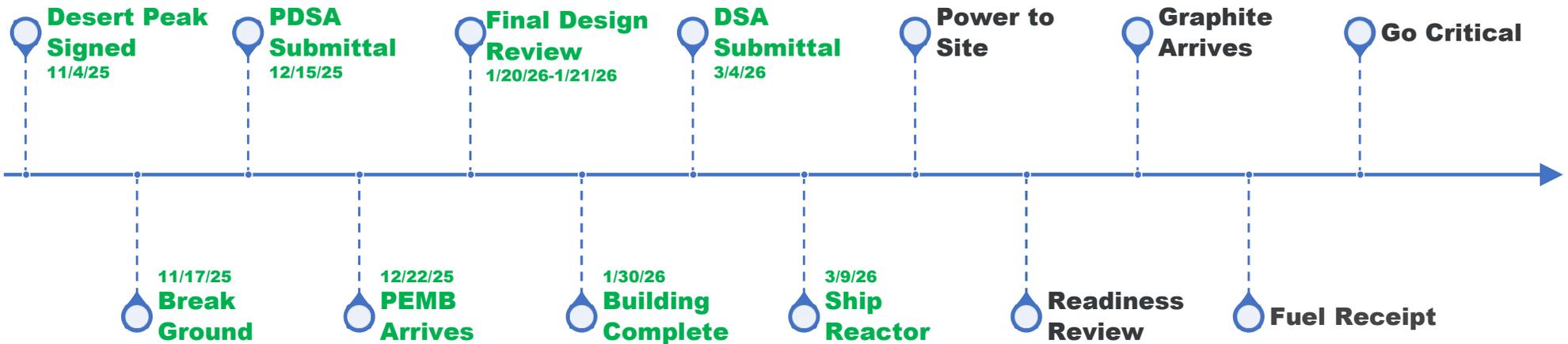
Proving Nuclear Core | Accelerating Commercial Deployment



# Reactor Pilot Program



U.S. DEPARTMENT OF  
**ENERGY**  
Office of  
**NUCLEAR ENERGY**



## Aalto-X CAF

Accelerating Aalto's Commercial Deployment

### Control Room

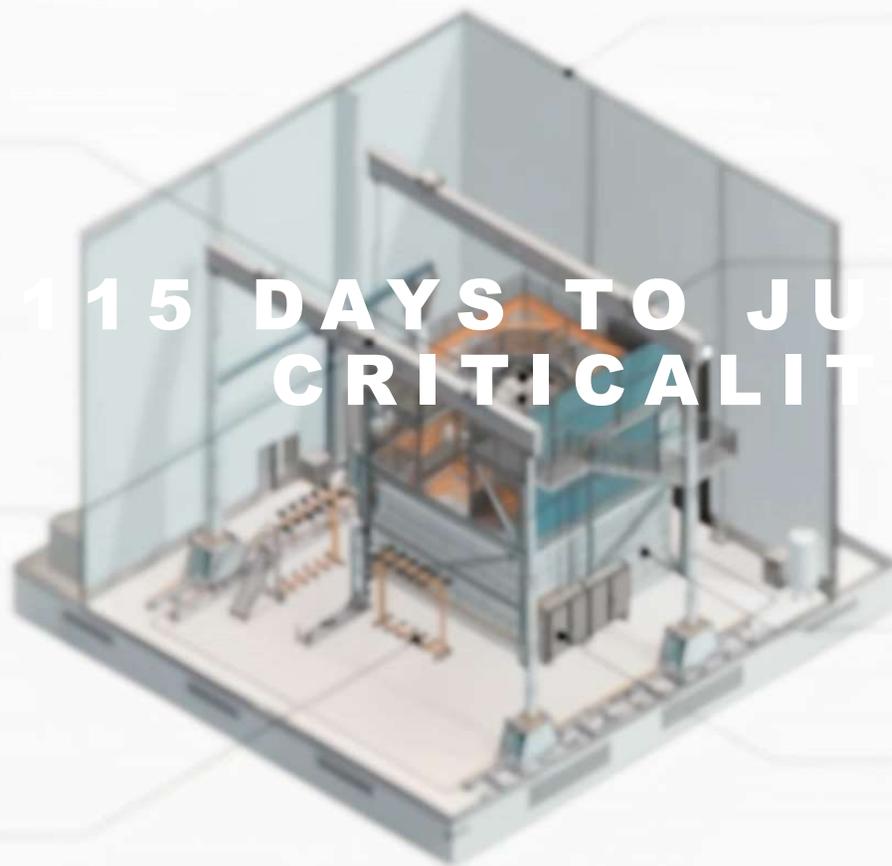
Providing remote monitoring and control

### Crane

Essential for heavy-lift operations and assembly

### Fuel Assembly Fixtures

Design supporting safe and efficient fuel handling



### Critical Assembly Facility

Designed for safe and efficient operation

### Reactor Vessel

Central component for neutron moderation

### Shielding

Neutron and gamma radiation protection

### Electrical Cabinets & Control Systems

Integrates instrumentation and control systems

115 DAYS TO JULY 4<sup>TH</sup>  
CRITICALITY

# Aalo-X Campus Enabled By DOE Reactor Pilot Program

## Aalo-X Full-Power Reactor & Turbine Buildings

FOAK Full Power Plant (Construction began Nov. 2025)

## Critical Assembly Facility (CAF)

Proving Nuclear Core  
Criticality by July 4, 2026

## Aalo-0

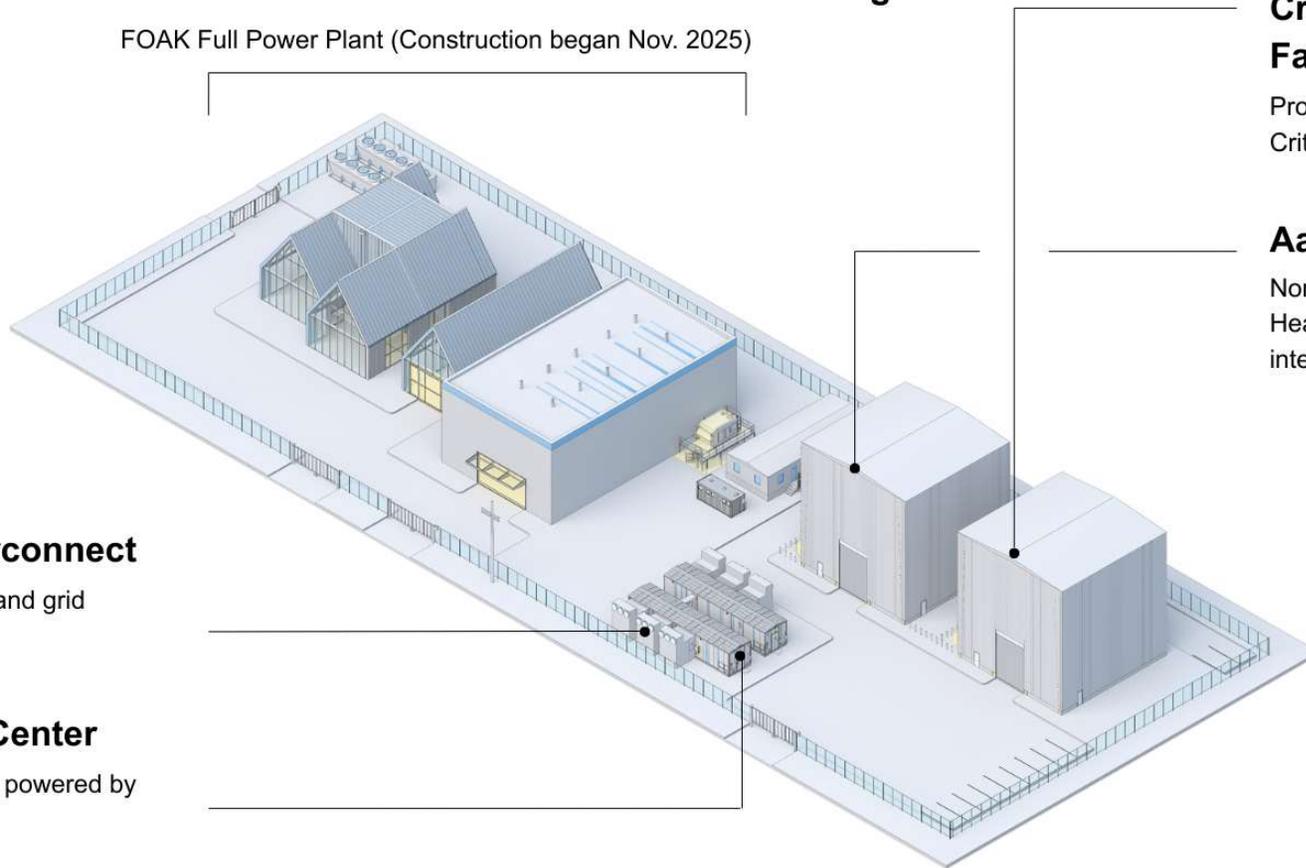
Non-nuclear Sodium-to-Steam  
Heat Exchange and data center  
integration prototyping

## Electrical Interconnect

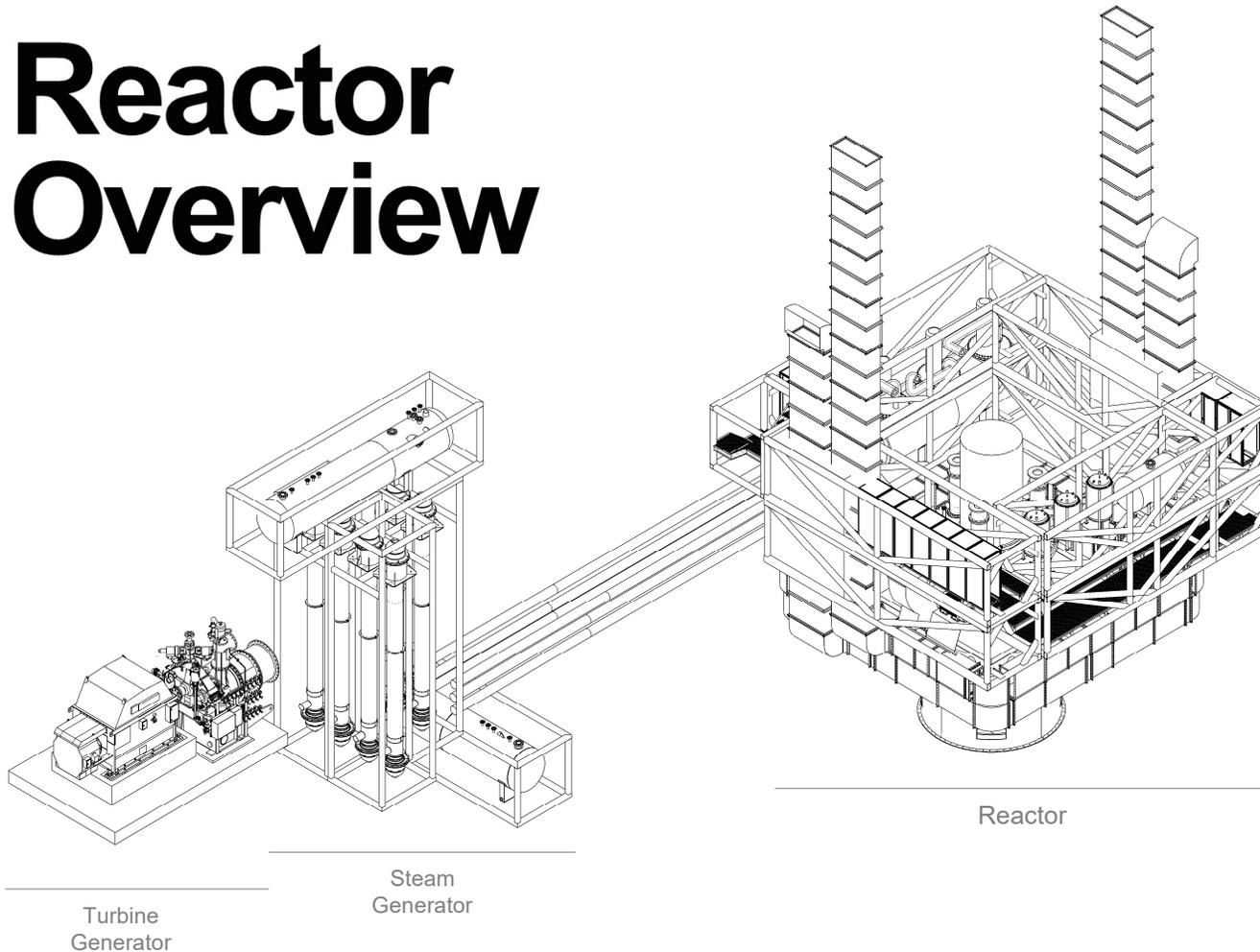
Testing switchgear and grid  
connections

## Mobile Data Center

Crusoe Spark MDC powered by  
Aalo-0 in 2026



# Reactor Overview



**Sodium-cooled**  
**Graphite Moderated**  
**8% <sup>235</sup>UO<sub>2</sub> Fueled**  
**Passive Safety**  
**Factory DFMA**

AALO REACTOR DESIGN IS TECHNO-ECONOMICALLY OPTIMAL, WITH HIGH TRL AND MRL.

# Aalo Pod

<b>Power</b>	50 MWe
<b>Reactor Building Footprint</b>	25,400 sqft
<b>Annex Building Footprint</b>	6,897 sqft
<b>Generator Buildings Footprint</b>	22,466 sqft
<b>Ultimate Heat Rejection</b>	Ambient Air
<b>Site Footprint</b>	2.5 acres
<b>Plant Design Lifetime</b>	40 years
<b># Operators Per Shift</b>	2
<b>Target Refueling Outage</b>	3-4 weeks / reactor outage



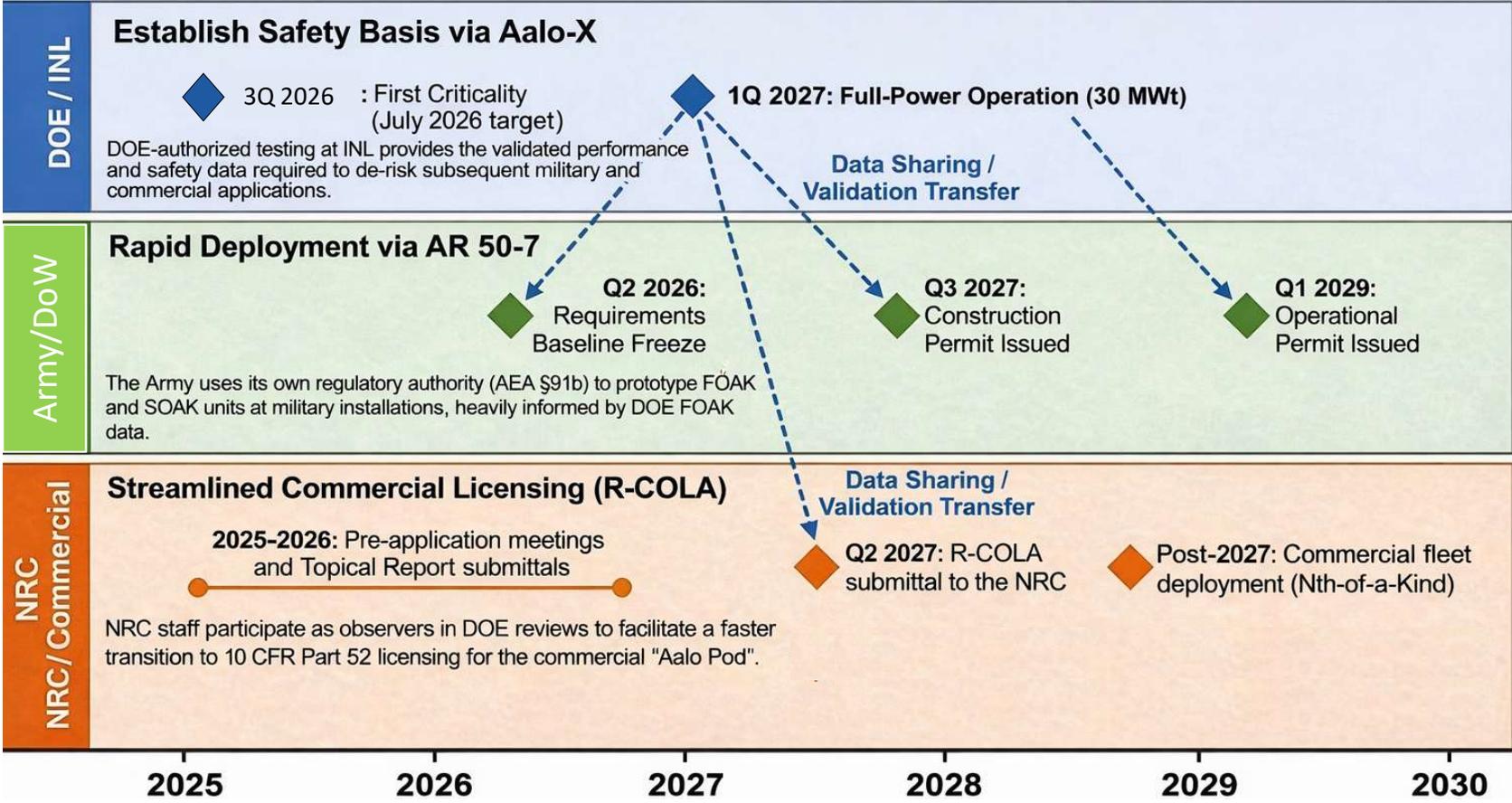
## Availability through Redundancy

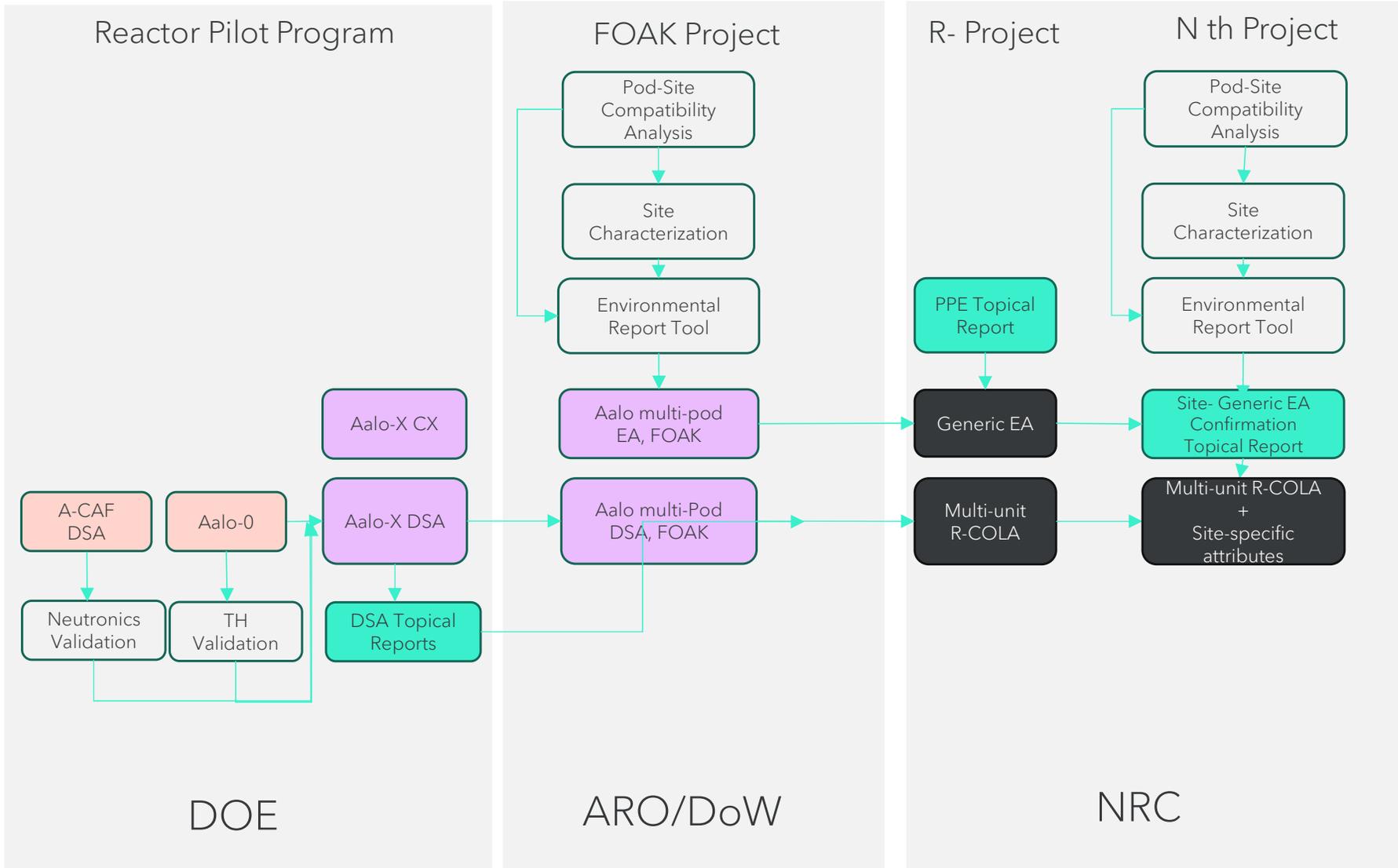
- 5 reactors
- independant steam generators
- shared control room
- shared refueling machine

PURPOSE-BUILT FOR APPLICATIONS WHERE HIGH AVAILABILITY IS CRUCIAL E.G. DATA CENTERS AND U.S. MILITARY BASES



# Integrated Regulatory & Deployment Roadmap





# Thank You

Panel Session

[YASIR@AALO.COM](mailto:YASIR@AALO.COM)

Aalo